

8. PILOT PARKING STUDY

There are a myriad of truck parking problems in the District's central business areas: insufficient loading zone space on- and off-street; loading spaces that are too small for large trucks to use; inconsistent enforcement of parking regulations, especially double-parking; low turnover of metered passenger-vehicle spaces; and time-of-day loading zone designations that do not coincide with heavy courier and truck deliveries. While it is outside the scope of this study to address specific problem spots, to gain a better understanding of parking and loading issues, Volpe did a careful analysis of truck parking conditions on K Street between 16th and 21st Streets NW.

This area was chosen because of its importance as one of the main commercial and office districts of the city. The Golden Triangle area south of Dupont Circle has over 8,000 businesses, more than 600 national and international company headquarters, and more than 800 retail establishments. With the information from the study of this area, Volpe was able to learn important characteristics of truck parking in one of Washington's busiest commercial areas, and to come up with a list of recommendations for a parking plan for the area, and perhaps for other parts of the city as well.

8.1 STUDY AREA CHARACTERISTICS

K Street between 16th and 21st Streets NW (hereafter referred to as the study area) is located directly northwest of the White House. It contains a FedEx World Service Center, several prominent banks, and many restaurants. Transit access is available from the Farrugut North Metro Station on the corner of K Street and Connecticut Avenue. Parking garages are available throughout the area and many blocks have alleyways for off-street loading and unloading.

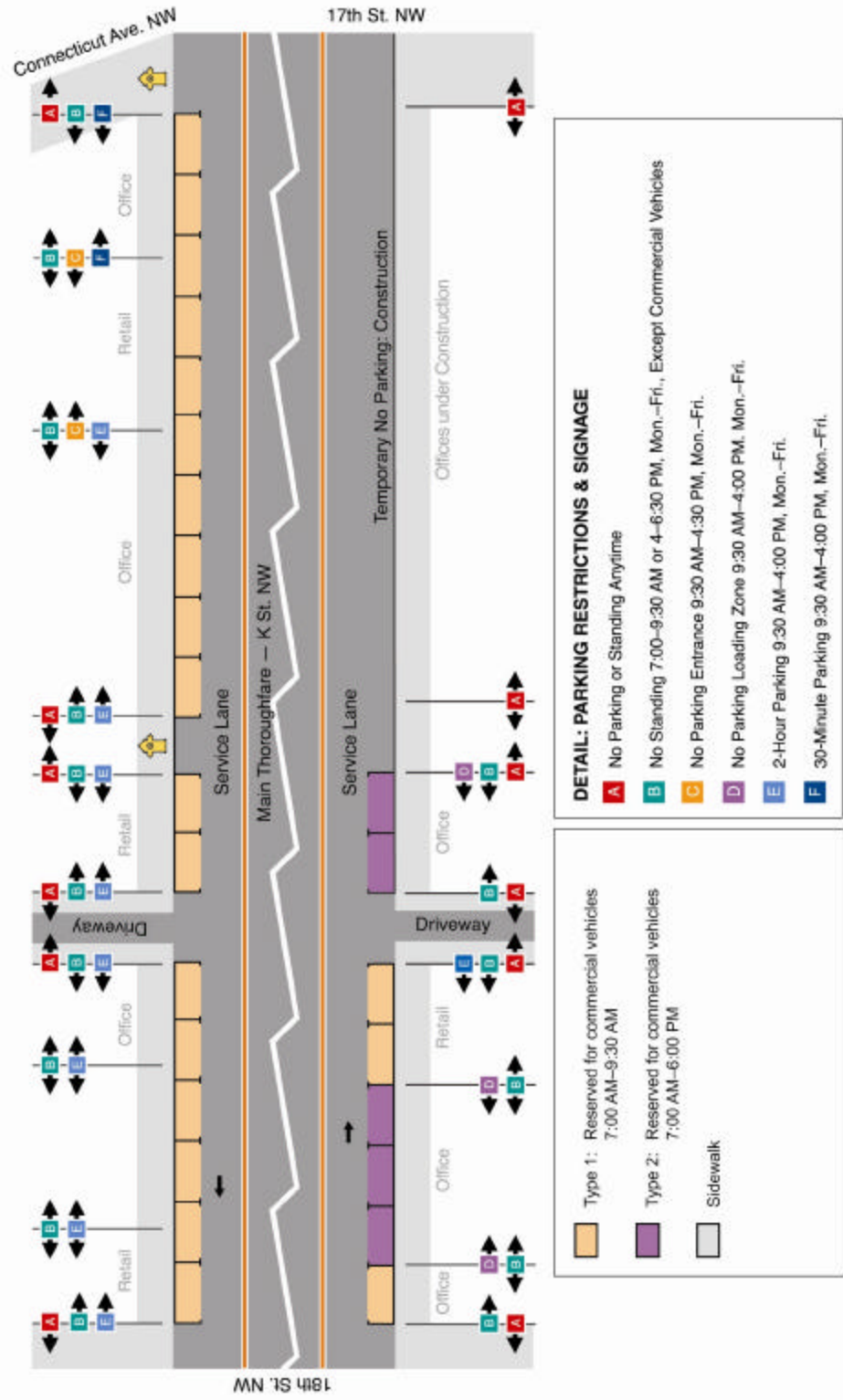
Most of the blocks in the study area have a mix of office and retail businesses, with the retail on the first floor and offices above. Figure 24 shows the street configuration, parking regulations, and commercial properties on K Street between Connecticut Avenue and 18th Street, a typical block in the study area.

8.2 EXISTING PARKING INFRASTRUCTURE

The signs on the curbsides provide two types of on-street spaces available for loading and unloading in the commercial area:

- Type 1. *No standing except commercial vehicles from 7:00 to 9:30 AM and 4:30 to 6 PM.*
- Type 2. *In addition to above, No parking except loading and unloading 9:30 AM to 4:30 PM.* The combination of these two restrictions results in parking spaces reserved exclusively for commercial vehicles between 7 AM and 6 PM.

**Figure 24. On-street Configuration —
K Street NW Between Connecticut Avenue NW and 18th Street NW**

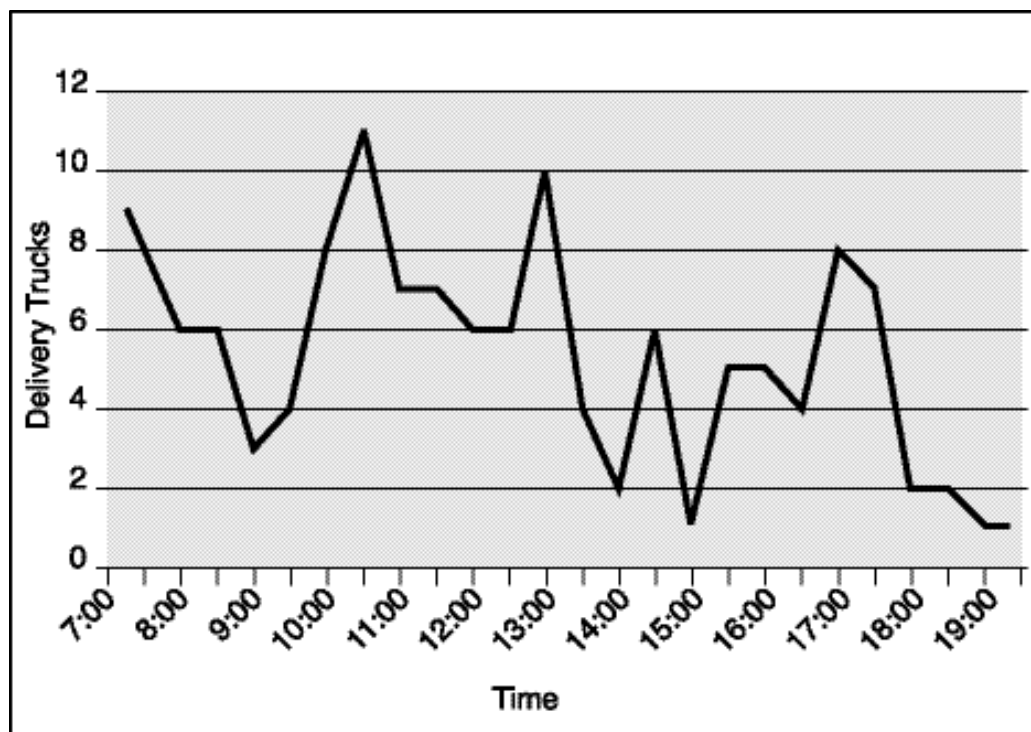


Type 1 spaces become metered parking spaces for passenger vehicles in off-peak hours. Each block has 15-20 passenger-car-sized metered spaces, resulting in about 150 Type I spaces in the study area. Type 2 spaces are governed by two different signs that prohibit parking by passenger vehicles during the peak periods (one sign) and in between the peak periods (another sign), resulting in an exclusive loading zone from 7 AM to 6 PM. There is approximately one Type 2 space per block and eight for the entire study area.

8.3 TRUCK BEHAVIOR OBSERVATIONS

The parking and loading/unloading behavior of trucks was observed during a 12-hour period between 7 AM and 7 PM on a weekday. A total of 144 trucks entered and exited the study area during the observation period, for an average of about 12 trucks per hour. Figure 25 shows the number of trucks entering the study period for each 30-minute interval during the observation time.

Figure 25. Trucks per 30 Minutes
K Street between Connecticut Avenue and 18th Street NW



The 12-hour observation period shows three distinct peaks:

- Morning peak around 10 AM
- Noontime peak around 12:30 PM
- Afternoon peak around 5 PM

Three kinds of truck trips were made to the study area: food and beverage deliveries, mail and courier service deliveries, and other services such as elevator repair vehicles. Table 12

contains the details of the truck trips: the number of trucks in each trip category, the average parked time for each truck, and the range of parking times observed.

Table 12. Delivery Statistics for the Study Area

Type of Trip	Number of Trucks	Average Parked Time (minutes)	Range (minutes)
Food and beverage	22	12	2-74
Courier (USPS, FedEx, UPS)	42	20	1-105
Other	80	31	1-360
Overall	144	28	1-360

Courier vehicles and trucks delivering food and beverages were primarily 2-axle, 4- and 6-tire vehicles, with a few larger 3-axle trucks. The “other” category had a significant number of commercial and service vans.

Approximately 14 instances of parking violations were observed during the 12-hour observation period. These included parking on the main thoroughfare of K Street rather than on the service street, parking on the median between the main thoroughfare and the service street, and double-parking such that traffic flow was severely affected.

More trucks entered the study period during the hour just after the morning peak period loading zone restrictions expired and during the lunch hour between noon and 1 PM than during any other hours of the day. Loading spaces were generally available for trucks during the morning peak because most metered spaces are reserved for loading zones during this time. However, after the morning peak period, significant congestion resulted from trucks that lacked parking spaces. There is a mismatch between the hours that trucks need parking spaces and existing parking restrictions.

Note that the commercial vehicle designation on the curbside signs allows spaces reserved for loading zones to be occupied by all vehicles with commercial license plates, regardless of whether they are loading and unloading goods. On-site observations revealed that many vans with commercial license plates blocked loading areas all day long. While this is technically legal, these vehicles did not contain goods that needed to be loaded or unloaded, thus reducing the number of spaces available for delivery vehicles. There is little turnover of these loading spaces for courier and other trucks needing spaces for short periods of time.

While each block in the study area had at least one Type 2 space, this seemed to be insufficient for the requirements of the area. Additionally, there appeared to be inadequate turnover of these spaces, with commercial vehicles occupying them for long periods of time without actively loading or unloading goods.

Observations revealed that larger trucks (single unit, 3- or 4-axle trucks) were unable (or found it too difficult) to park in side lanes and alleyways, thus forcing them to block a traffic lane to make deliveries. This was one of the main problems during the afternoon off-peak hours.

8.4 STAKEHOLDER PERSPECTIVES

To ensure that the needs of businesses and freight operators are not adversely affected by the recommendations resulting from this pilot parking study, major stakeholders were interviewed. With assistance from the Golden Triangle BID, Volpe invited property managers, retail shop owners, and representatives from courier services to participate in this study by providing their perspective on truck traffic in the study area.

Each of the groups said that the lack of adequate parking enforcement was one of the main problems in the office district. Too often, they find spaces reserved for loading and unloading occupied by passenger vehicles. Property managers further noted that most deliveries to their buildings take place in the alleyways. While the alleyways with an outlet are convenient for this purpose, other alleyways are extremely inconvenient because they require trucks to back out of the alleyway. Property managers mentioned plans for consolidated loading/unloading centers for each office block to alleviate truck parking problem and address security issues. Representatives from courier companies expressed a willingness to meet with building managers about this issue.

Additionally, property managers noted that District regulations generally prohibit trash haulers from picking up trash before 7 AM. This causes large trash trucks to come in during the peak hour to clear garbage in the morning. This results in increased congestion during morning peak hours.

The stakeholders noted that there is very little short-term parking in the study area largely because employees who work in the area occupy the spaces all day, feeding the meter every two hours. Interviewees felt that this defeated the purpose of the meter, which is intended to create short-term parking for shoppers and visitors.

Courier services mentioned that the morning peak was extremely important to them as most deliveries are made during this time period. While they felt that their quick delivery stops resulted in high turnover of parking spaces, they also felt that there simply are not enough parking spaces available to them, forcing drivers to park illegally. In some cases, drivers who want to park legally are forced to park up to two blocks away from their delivery destination. Representatives from courier companies said that they would be willing to pay a premium to ensure that short-term parking spaces were available for their vehicles.

Retail stakeholders were concerned primarily with parking enforcement to ensure turnover in parking spaces so that their customers can find a convenient spot. They also noted that the morning peak was an important delivery time for them because most deliveries are made before noon. The retail representatives said that the delivery schedule was largely in the hands of the truck operators and felt they had little say in the matter. They also expressed concern that trucks sometimes tie up an alleyway for hours while making deliveries,

waiting, or parking. This loading and unloading space is then not available for other deliveries.

8.5 RECOMMENDATIONS

The following are recommendations for a parking plan based on conditions in the study area:

Short-term:

- Increase the number of dedicated loading/unloading spaces per block, both on- and off-street. One idea is to follow Chicago's lead in requiring that one loading space be provided for every 100,000 square feet of commercial space.
- Expand morning parking restrictions to 11 AM to accommodate couriers and deliveries of perishable goods.
- Modify curbside signs so that loading zones are reserved for vehicles that are actively loading or unloading goods. This will increase turnover of parking spaces.
- Implement a maximum time that vehicles can occupy loading zones. The allowed time can be based on the average time needed for the various kinds of loading and unloading activities.
- Encourage building owners to reserve off-street parking spaces for commercial vehicles that are expected to be parked for several hours, such as vans used by companies doing repairs in the building.
- Step up enforcement of parking regulations, especially those that apply to vehicles that are blocking a traffic lane or that are illegally parked in a commercial vehicle zone.
- Eliminate multiple and confusing signs to clarify parking regulations.
- Publicize the DPW tow-away hotline, which accepts complaints about illegally parked vehicles and may tow them away.

Long-term:

- Consider restricting parking of trucks larger than 2-axle, 6-tire vehicles to off-peak.
- Install parking meters for commercial vehicles in restricted spaces to encourage turnover.
- Increase fines for parking offenses.
- Consider the implementation of a fee system whereby couriers pay a premium to have parking spaces reserved solely for their vehicles during their peak delivery times.
- Implement a permit system for commercial vehicles that occasionally need space all day for doing maintenance and other work in area buildings. These vehicles would be allowed to occupy on-street loading/unloading spaces with the permit even if they are not actively loading or unloading goods. Building owners would be allowed a limited number of permits for such vehicles.

8.7 ENFORCEMENT

Enforcement of parking regulations is an important component of any strategy to ameliorate on-street parking problems. DDOT should work with the DPW—which is currently responsible for parking enforcement—to ensure that parking regulations are regularly enforced. This is particularly important in areas where double-parking is a pervasive problem. Parking officials should concentrate enforcement activities on passenger vehicles that are illegally parked in loading zones and on any vehicles—commercial or private—that are double-parked and blocking travel lanes.

To better coordinate parking policy, enforcement, and traffic operations, parking enforcement responsibilities should be housed in the same agency as traffic operations and parking policy. Further, the District government may want to consider increasing parking fines to increase their deterrent effect.